

Title (en)

METHOD AND APPARATUS FOR EXTRACTING AND DELIVERY OF ENTITIES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR EXTRAKTION UND BEREITSTELLUNG VON EINHEITEN

Title (fr)

PROCÉDÉ ET APPAREIL D'EXTRACTION ET D'ADMINISTRATION D'ENTITÉS

Publication

EP 3478188 A4 20200909 (EN)

Application

EP 17818791 A 20170630

Priority

- US 201662357485 P 20160701
- CA 2017050803 W 20170630

Abstract (en)

[origin: WO2018000102A1] Various embodiments are described herein for a device for using acoustic or mechanical energy to perform an action at a target site of an object. The device comprises a conduit having an aperture disposed at the target site, a displacement signal source for generating a mechanical displacement signal, a coupling assembly having for coupling the displacement signal source to the conduit, a pressure controller coupled to the proximal end of the conduit to vary an amount of pressure in the conduit when obtaining a first entity from or delivering a second entity to the target site, and a control unit for controlling the displacement signal source to generate the mechanical displacement signal based on a desired acoustic or mechanical wave mode.

IPC 8 full level

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CPC (source: EP US)

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A61B 2017/320098 (2017.08 - EP); **A61B 2090/064** (2016.02 - EP); **A61B 2562/0247** (2013.01 - US)

Citation (search report)

- [A] US 2010004558 A1 20100107 - FRANKHOUSER PAUL L [US], et al
- [A] US 2011160620 A1 20110630 - GILL JAGJIT [US], et al
- [A] DE 2065681 A1 19750320 - KLOZ EDUARD
- [A] US 2010135717 A1 20100603 - THOMS MICHAEL [DE]
- [A] US 3792701 A 19740219 - KLOZ H, et al
- [A] US 2010100139 A1 20100422 - YOUNG MICHAEL JOHN RADLEY [GB]
- See also references of WO 2018000102A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 201800102 A1 20180104; AU 2017290112 A1 20190214; AU 2017290112 B2 20220310; CA 3028252 A1 20180104;
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EP 3478188 B1 20231108; FI 3478188 T3 20240207; JP 2019528807 A 20191017; JP 7016325 B2 20220204; US 11446013 B2 20220920;
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